



ATTORNEY DOCKET NO. 21101.0004U3  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	)	
	)	
Bock <i>et al</i>	)	Art Unit: 1653
	)	
Application No. 10/014,658	)	Examiner: H. Schnizer
	)	
Filing Date: December 11, 2001	)	Confirmation No. 7477
	)	
For: HUMAN ANTITHROMBIN IIIs AND	)	
METHODS RELATED THERETO	)	

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
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NEEDLE & ROSENBERG, P.C.  
Customer Number 23859

Sir:

Pursuant to the requirements of 37 C.F.R. § 1.56, submitted herewith on the accompanying Form PTO 1449 is a listing of documents known to Applicants and/or their attorneys. A copy of each of these documents is enclosed.

The Commissioner is hereby authorized to charge the fee in the amount of \$180.00, representing the fee under 37 C.F.R. § 1.17(p), to Deposit Account No. 501977. This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Consideration of the cited documents and making the same of record in the prosecution of the above-referenced application are respectfully requested.

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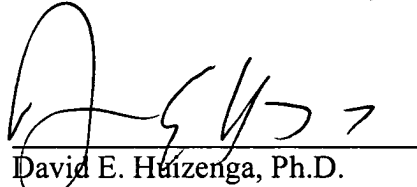
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**Application No. 10/014,658**

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

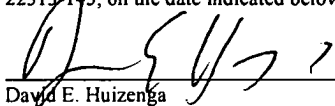


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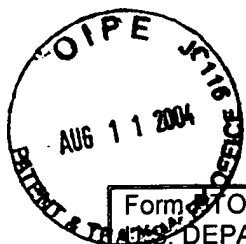
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**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8**

I hereby certify that this correspondence, including any items indicated as attached or included, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

  
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David E. Huizenga

August 9, 2004  
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Date



Form PTO-1449		Complete if Known					
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		Application Number		10/014,658			
		Filing Date		December 11, 2001			
		First Named Inventor		Susan C. Bock			
		Group Art Unit		1653			
		Examiner Name		H. Schnizer			
<b>LIST OF INFORMATION CITED BY APPLICANT</b> (Use as many sheets as necessary)							
<b>U.S. PATENT DOCUMENTS</b>							
Examiner's Initials	Cite No.	Document No.	Date	Name	Class	Subclass	Filing Date (if appropriate)
	B1	5,204,253	4/20/1993	Sanford, et al.			
	B2	5,843,705	12/1/1998	DiTullio, et al.			
<b>FOREIGN PATENT DOCUMENTS</b>							
Examiner's Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code	Date	Name	Translation Yes/No		
	B3	WO 95/19799	7/27/1995	McCabe			
	B4	WO 95/05853	3/2/1995	Carson et al.			
<b>NON-PATENT DOCUMENTS</b>							
Examiner's Initials	Cite No.	Non-Patent Citations (include Author, Title, Publisher, Relevant Pages, Date and Place of Publication)					
	B5	Blauhut et al. "Substitution of antithrombin III in shock and DIC: a randomized study." Thromb Res. 1985 Jul 1;39(1):81-9.					
	B6	Buller and ten Cate, "Acquired antithrombin III deficiency: laboratory diagnosis, incidence, clinical implications, and treatment with antithrombin III concentrate." Am J Med. 1989 Sep 11;87(3B):44S-48S.					
	B7	Damus and Wallace, "Immunologic measurement of antithrombin III-heparin cofactor and $\alpha_2$ -macroglobulin in disseminated intravascular coagulation and hepatic failure coagulopathy." Thromb Res. 1975 Jan;6(1):27-38.					
	B8	Delshammar et al. "Abnormal proteolysis (DIC)--successful treatment with antithrombin III concentrate and a concentrate containing F XIII and native von Willebrand factor." J Intern Med. 1989 Jan;225(1):21-7.					
	B9	Dickneite and Paques, "Reduction of mortality with antithrombin III in septicemic rats: a study of Klebsiella pneumoniae induced sepsis." Thromb Haemost. 1993 Feb 1;69(2):98-100, 102.					
	B10	Emerson et al. "Efficacy of antithrombin III supplementation in animal models of fulminant Escherichia coli endotoxemia or bacteremia." Am. J. Med. 1989 Sep 11;87(3B):27S-33S.					
	B11	Ersdal-Badju et al. "Elimination of glycosylation heterogeneity affecting heparin affinity of recombinant human antithrombin III by expression of a $\beta$ -like variant in baculovirus-infected insect cells. Biochem. J. 1995 Aug 15;310:323-30.					
	B12	Fourrier et al. "Double-blind, placebo-controlled trial of antithrombin III concentrates in septic shock with disseminated intravascular coagulation." Chest. 1993 Sep;104(3):882-8.					
	B13	Franzen et al. "Structural Studies on the Carbohydrate Portion of Human Antithrombin III." J. Biol. Chem. 1980 Jun 10;255(11):5090-3.					
	B14	Hedin et al. "Antithrombin III inhibits thrombin-induced proliferation in human arterial smooth muscle cells." Arterioscler Thromb. 1994 Feb;14(2):254-60.					
	B15	Hellgren et al. "Blood coagulation and fibrinolytic factors and their inhibitors in critically ill patients." Intensive Care Med. 1984;10(1):23-8.					
	B16	Hellgren et al. "Antithrombin III concentrate as adjuvant in DIC treatment. A pilot study in 9 severely ill patients." Thromb Res. 1984 Aug 15;35(4):459-66.					
	B17	Jochum, "Influence of high-dose antithrombin concentrate therapy on the release of cellular proteinases, cytokines, and soluble adhesion molecules in acute inflammation." Semin Hematol. 1995 Oct;32(4 Suppl 2):19-32.					
	B18	Kurachi et al. "Inhibition of Bovine Factor IX <sub>a</sub> and Factor X <sub>a</sub> by Antithrombin III." Biochemistry 1976 Jan 27;15(2):373-7.					



	B19	Lammle et al. "Plasma prekallikrein, factor XII, antithrombin III, C <sub>1</sub> -inhibitor and α <sub>2</sub> -macroglobulin in critically ill patients with suspected disseminated intravascular coagulation (DIC)." Am J Clin Pathol. 1984 Oct;82(4):396-404.
	B20	Lawson et al. "Complex-dependent inhibition of factor VIIa by antithrombin III and heparin." J. Biol. Chem. 1993 Jan 15; 268(2):767-70.
	B21	Mammen et al. "Human antithrombin concentrates and experimental disseminated intravascular coagulation." Semin Thromb Hemost. 1985 Oct;11(4):373-83.
	B22	Mant et al. "Haemorrhagic complications of heparin therapy." Lancet. 1977 May 28;1(8022):1133-5.
	B23	Marcum et al. "Microvascular heparinlike species with anticoagulant activity." Am. J. Physiol. 1983 Nov; 245(5 Pt 1):H725-33.
	B24	Mizuuchi et al. "Structural studies of the carbohydrate moiety of human antithrombin III." Arch Biochem Biophys. 1980 Aug;203(1):458-65.
	B25	Nuijens et al. "Plasma elastase α <sub>1</sub> -antitrypsin and lactoferrin in sepsis: evidence for neutrophils as mediators in fatal sepsis." J Lab Clin Med. 1992 Feb;119(2):159-68.
	B26	Ostrovsky et al. "Antithrombin III prevents and rapidly reverses leukocyte recruitment in ischemia/reperfusion." Circulation. 1997 Oct 7;96(7):2302-10.
Book	B27	Petersen et al. <i>The Physiological Inhibitors of Coagulation and Fibrinolysis</i> . 43-54. Elsevier/North Holland Biomedical Press (1979).
	B28	Peterson and Blackburn, "Isolation and characterization of an antithrombin III variant with reduced carbohydrate content and enhanced heparin binding." J. Biol. Chem. 1985 Jan 10; 260(1):610-5.
Book	B29	Picard and Bock, <i>Methods in Molecular Biology, Vol. 67: PCR Cloning Protocols: From Molecular Cloning to Genetic Engineering</i> . 183-8. B. A. White Humana Press Inc., Totowa, NJ (1996).
	B30	Picard et al. "A rapid and efficient one-tube PCR-based mutagenesis technique using <i>Pfu</i> DNA polymerase." Nucleic Acids Res. 1994 Jul 11;22(13):2587-91.
	B31	Rao et al. "Binding of factor VIIa to tissue factor permits rapid antithrombin III/heparin inhibition of factor VIIa." Blood. 1993 May 15;81(10):2600-7.
	B32	Rosenberg and Damus, "The purification and mechanism of action of human antithrombin-heparin cofactor." J. Biol. Chem. 1973 Sep 25;248(18):6490-505.
	B33	Rosenberg, "Chemistry of the hemostatic mechanism and its relationship to the action of heparin." Fed Proc. 1977 Jan;36(1):10-8.
	B34	Ruf and Mueller, "Tissue factor in cancer angiogenesis and metastasis." Curr Opin Hematol. 1996 Sep;3(5):379-84.
	B35	Seitz et al. "Participation and interactions of neutrophil elastase in haemostatic disorders of patients with severe infections." Eur J Haematol. 1987 Mar;38(3):231-40.
	B36	Uchiba and Okajima, "Antithrombin III (AT III) prevents LPS-induced pulmonary vascular injury: novel biological activity of AT III." Semin Thromb Hemost. 1997;23(6):583-90.
	B37	Van Boven and Lane, "Antithrombin and its inherited deficiency states." Semin Hematol. 1997 Jul;34(3):188-204.
	B38	Wolff et al. "Direct gene transfer into mouse muscle in vivo." Science 1990 Mar 23;247(4949 Pt 1):1465-8.
	B39	Zendeherouh, "Novel proteinase inhibitors for use in the treatment of sepsis." <i>Dissertation submitted to the Temple University Graduate Board</i> , 165 pages (May 1998).
Examiner Signature:		Date Considered:
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		